

REMARKS

Applicants appreciate the Examiner's thorough examination of the present application as evidenced by the Final Office Action of August 11, 2006 (hereinafter "Final Action"). Applicants especially appreciate the continued indication that dependent Claims 6 and 22 recite patentable subject matter. In response, Applicants respectfully request that the Examiner take one final look at independent Claims 1, 11, 14, 17, 25, 30 - 32, 37, and 38 in light of the remarks presented herein. Applicants respectfully submit that the cited references fail to disclose or suggest the recitations of the pending independent Claims. Therefore, Applicants respectfully submit that all pending claims are in condition for allowance. Favorable reconsideration of all pending claims is respectfully requested for at least the reasons discussed hereafter.

Independent Claims 1, 17, 25, and 32 are Patentable

Independent Claim 1 recites, in part:

receiving a noise signal;
generating a sound metric for the noise signal by performing a Fourier transform on the noise signal to obtain a frequency domain representation of the noise signal, wherein the sound metric is a loudness profile; and
generating an alert signal having a spectral composition based on the sound metric.

Independent Claims 17, 25, and 32 include similar recitations.

Independent Claims 1, 17, 25, and 32 stand rejected under 35 U.S.C. §102(e) as being anticipated by U. S. Patent Publication No. 2006/0014570 to Marx et al. (hereinafter "Marx"). (Final Action, page 2). The Final Action states that "Marx teaches that a frequency domain representation of a measured ambient level can be used to alter the loudness of a ring alert of a telephone, the inherent conversion between the time and frequency domains is the Fourier transform." (Final Action, page 3). Applicants respectfully disagree with this interpretation of Marx's teachings. Marx describes a mobile communication terminal that includes an equalizer 12, a loudspeaker 14, and a control unit

15. (Marx, FIG. 2). The control unit 15 determines the type of audio to be played through the loudspeaker 14, i.e., whether the audio is a ringing tone of an alarm, a speech signal, or a music signal. (Marx, paragraphs 33, 35, and 36). Based on this determination and the volume setting on the mobile communication terminal, the attenuation applied by the equalizer 12 to the signal is adjusted to take advantage of the frequency response characteristic of the loudspeaker 14. (Marx, paragraphs 33, 35, and 36).

Thus, in sharp contrast to the recitations of independent Claims 1, 17, 25, and 32, Marx does not appear to include any disclosure related to receiving a noise signal, generating a sound metric for the noise signal by performing a Fourier transform on the noise signal, and generating an alert signal that has a spectral composition based on the sound metric.

For at least the foregoing reasons, Applicants respectfully submit that independent Claims 1, 17, 25, and 32 are patentable over Marx and that dependent Claims 4 – 10, 20 – 24, 28, 29, 35, and 36 are patentable at least as they depend from an allowable claim.

Independent Claims 11, 30, and 37 are Patentable

Independent Claims 11, 30, and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Marx in view of U. S. Patent No. 6,134,455 to Corkum (hereinafter "Corkum"). (Final Action, page 6). Independent Claim 11 recites, in part:

- providing a plurality of alert profiles, each of the alert profiles being generated to have a spectral composition based on a noise signal sound metric associated with an ambient noise environment;
- receiving a user selection of one of the plurality of alert profiles; and
- generating an alert signal that is based on the selected one of the plurality of alert profiles.

Independent Claims 30 and 37 include similar recitations.

In rejecting independent Claims 11, 30, and 37, the Final Action cites paragraph 32 Marx as describing an alert profile that is generated to have a spectral composition based on a noise signal sound metric associated with an ambient noise environment. (Final Action, page 6). As discussed above with respect to independent Claims 1, 17, 25, and 32,

Marx does not appear to disclose or suggest using a noise signal sound metric associated with an ambient noise environment to provide an alert profile with a particular spectral composition. Moreover, Applicants submit that Corkum fails to provide the teachings missing from Marx.

The Final Action cites col. 6, lines 48 - 55 of Corkum as teaching the use of a plurality of alert profiles. (Final Action, page 6). This passage describes the ability of a user to override the automatic ringervolume function by selecting a default or desired annunciation level. (Corkum, col. 6, lines 55 – 60). In sharp contrast to the recitations of independent Claims 11, 30, and 37, however, Corkum does not appear to disclose or suggest that the particular annunciation levels that can be selected by a user are generated based on a noise signal sound metric that is associated with an ambient noise environment. Furthermore, Corkum does not disclose or suggest generating an alert signal that has a spectral composition based on a sound metric for a noise signal.

For at least the foregoing reasons, Applicants respectfully submit that independent Claims 11, 30, and 37 are patentable over Corkum and that dependent Claims 12 and 13 are patentable at least as they depend from an allowable claim.

Independent Claims 14, 31, and 38 are Patentable

Independent Claims 14, 31, and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Marx in view of Corkum. (Final Action, page 6). Independent Claim 14 is directed to a method of operating an electronic device and recites, in part:

- providing a plurality of alert profiles, at least one of the plurality of alert profiles having a different spectral composition than other ones of the plurality of alert profiles; then
- receiving a noise signal;
- selecting one of the plurality of alert profiles responsive to receiving the noise signal; and
- generating an alert signal that is based on the selected one of the plurality of alert profiles.

Thus, according to independent Claim 14, a plurality of alert profiles is generated before the noise signal is received. One of the alert profiles is selected in response to receiving the noise signal.

In sharp contrast, Marx does not disclose or suggest selecting an alert profile from among a plurality of alert profiles responsive to receiving a noise signal, but instead suggests adjusting the equalization applied to the alert signal responsive to a volume control setting and a signal that a ringing tone of an alarm is to be reproduced. (Marx, paragraph 33). Moreover, Corkum fails to provide the teachings missing from Marx.

Corkum describes determining the loudness of the ringing tone in response to receiving a paging signal and the ambient noise level at that time. (Corkum, col. 6, line 66 – col. 7, line 33). Corkum emphasizes that "[t]he loudness level of the ringing tone is thereby dynamically determined just prior to termination of a call at the mobile station. The loudness level of a ringing tone generated by the mobile station is thereby better able to be selected to be of a loudness level appropriate for the conditions in which the mobile station is positioned." (Corkum, col. 7, lines 34 – 40). Applicants submit, therefore, that Corkum does not appear to suggest pre-storing alert profiles that can be selected upon receiving a noise signal, but instead teaches generating a loudness level for the ringing tone each time a paging signal is received based on the ambient noise level at that time.

Furthermore, Corkum does not disclose or suggest generating alert signals that have different spectral compositions, but instead is limited to adjusting a loudness level of an alert or ringing signal based on the ambient noise level (Corkum, col. 5, line 63 - col. 6, line 15 and col. 7, lines 54 - 65).

For at least the foregoing reasons, Applicants respectfully submit that independent Claims 14, 31, and 38 are patentable over Marx and Corkum and that dependent Claims 15 and 16 are patentable at least as they depend from an allowable claim.

Various Dependent Claims are Separately Patentable

With regard to dependent Claim 9, this claim includes all of the recitations from independent Claim 1 and is, therefore, patentable over Marx for at least the reasons stated

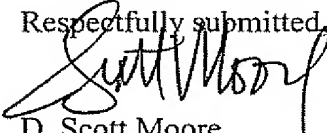
In re: VanEpps, Jr. et al.
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above. Applicants submit that dependent Claim 9 is also separately patentable over Marx for reasons similar to those discussed above with respect to independent Claims 14, 31, and 38. That is, Marx does not disclose or suggest receiving a noise signal and generating the sound metric for the noise signal before receiving an incoming communication. Applicants submit that dependent Claim 9 is separately patentable for at least these additional reasons.

With regard to dependent Claims 6 and 22, these Applicants submit that these claims are separately patentable as indicated in the Final Action.

CONCLUSION

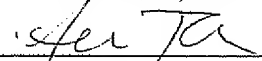
In light of the above amendments and remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,

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